

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM P. ENLOW

Appeal No. 95-3536
Application 08/038,400¹

ON BRIEF

Before JOHN D. SMITH, WEIFFENBACH and WARREN, *Administrative Patent Judges*.

WEIFFENBACH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 3, 5, 12-17, 19 and 20 which are the only claims remaining in the application.² We reverse.

¹ Application for patent filed March 29, 1993.

²Appellants' brief included claim 18. The examiner correctly noted that claim 18 had been canceled by appellant in an amendment after final (paper no. 10) which had been entered pursuant to appellant's appeal (see advisory action, paper no. 11).

The Claimed Subject Matter

The claimed subject matter is directed to an extrusion process for making polyolefin articles which includes a filtration system. The extrusion melt composition comprises the polyolefin, bis(2,4-di-tert-butylphenyl)pentaerythritol diphosphate stabilizer, and at least one epoxidized ester of an unsaturated fatty acid. Appellant has discovered that this melt composition results in reduced filter clogging. Claim 3 is representative of the claimed subject matter and reads as follows:

3. An extrusion process for making plastic articles, said process comprising:
 - a) forming a polyolefin composition comprising a polyolefin resin, a phosphite stabilizer, and at least one epoxidized ester of a fatty acid,
 - b) melt extruding said composition through a filtration system to produce a filtered polyolefin melt stream,
 - c) passing said melt stream through a die to make the plastic article, wherein said phosphite is a bis(2, 4-di-tert-butylphenyl)pentaerythritol diphosphite.

Prior Art References

The following prior art references is relied upon by the examiner in support of the rejection of the claims for obviousness:

Minagawa et al. (Minagawa)	4,371,647	Feb. 1, 1983
Moylan	4,832,882	May 23, 1989
Moore, Jr. (Moore)	4,888,369	Dec. 19, 1989

The Rejection

Claims 3, 5, 12-17, 19 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Minagawa in combination with Moylan and Moore.³

Opinion

We have carefully considered the entire record in light of the respective positions advanced by appellant and by the examiner. In doing so, we reverse the rejection of the claims for obviousness.

The claimed subject matter defines a process wherein a polyolefin composition is melt extruded through a filtration system before passing the melt into a die to make a plastic article. Appellant admits that the use of such filtration systems in extrusion systems for making polymeric fibers and films is known in the art (specification: p. 1, lines 6-19 and p. 3, lines 14-23).⁴ Moylan discloses a filtration system for reclaiming polyolefins containing impurities comprising the steps of

³The final rejection included three rejections. The first rejection was a rejection of claims 1, 2 and 4-11 under 35 U.S.C. § 103 over Minagawa and Moylan. The examiner's second rejection was a rejection of claim 3 under 35 U.S.C. § 1-3 over Minagawa, Moylan and Moore. The third rejection was a rejection of claims 12-20 under 35 U.S.C. § 103 over Minagawa, Moylan and Moore.

In an advisory action, the examiner indicated that the claims rejected were claims 3, 5 and 12-20. In the answer, the examiner's restatement of the rejection apparently is a consolidation of all three rejections into one rejection. However, the rejection of claim 5 would constitute a new ground of rejection since this claim was never rejected over the combination of Minagawa, Moylan and Moore. In view of our reversal of the rejection, there is no need to remand the case back to the examiner.

⁴It is well settled that admitted prior art should be taken into consideration when determining obviousness under 35 U.S.C. § 103. *In re Nomiya*, 509 F.2d 566, 571, 184 USPQ 607, 611-612 (CCPA 1975).

feeding the polyolefin to be reclaimed into an extruder through a hopper, heating the polyolefin above its melting point but below the melting point of the impurities in the polyolefin, and extruding the melted material through a filter or a filter pack to remove the impurities (col. 1, lines 42-46; col. 2, lines 40-60). Appellant further admits that phosphites are “known stabilization additives for polyolefins” (specification: p. 1, lines 19-24). Minagawa and Moore disclose adding a bis(2,4-di-tert-butylphenyl)pentaerythritol diphosphite stabilizer to inhibit the degradation of polyolefins (Minagawa: Cols. 21 and 22, Control 3; Moore: Examples 12-16). Minagawa discloses adding bis(2,4-di-tertiary-butyl phenyl) pentaerythritol diphosphite to polyisoprene (Table I, col. 22) and Minagawa teaches that the stabilized polyolefins compositions can shaped by extrusion or injection molding or fiber-forming operations (col. 21, lines 44-46). However, we fail to find that the prior art discloses or suggests a stabilized polyolefin composition which includes at least one epoxidized ester of a fatty acid.

Minagawa’s invention is directed to adding bis(2,6-di-tertiarybutylphenyl) pentaerythritol disphosphites to polymers such as polyolefins and polyvinyl chloride (PVC) to enhance the stability of the polymer (col. 8, lines 66-68; col. 20, lines 3-8). In discussing the (PVC) compositions, Minagawa discloses that conventional plasticizers can be combined with the diphosphite and PVC (col. 18, lines 31-41). Among the plasticizers listed is epoxidized soybean oil, appellant’s preferred epoxidized ester of a fatty acid. In a separate discussion for compositions comprising the diphosphite stabilizer and polyolefins, Minagawa broadly teaches that other conventional additives such as plasticizers can be added to the stabilized polyolefin (col. 21, lines 30-33), but does not give an

specific examples of plasticizers which can be employed. While Minagawa does refer to conventional plasticizers as including epoxidized soybean oil when discussing PVC, we find no disclosure or suggestion in Minagawa which would have motivated or led one skilled in the art to specifically select epoxidized esters of a fatty acids to be combined with a polyolefin and the phosphite stabilizer to arrive at the composition recited in the claimed process. Accordingly, for the reasons given above, the decision of the examiner is reversed.

REVERSED

JOHN D. SMITH
Administrative Patent Judge

CAMERON WEIFFENBACH
Administrative Patent Judge

CHARLES F. WARREN
Administrative Patent Judge

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